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I.

OF THE YELLOW FEVER.

THE state of the atmosphere in which the following chapter from Peixotto's Gregory is sent to the press, is a sufficient pledge that it will not be uninteresting to our readers.

The disease of which I propose here to treat under the title of the *yellow fever*, is that which, under the name of *Maladie de Siam*, or *Bulam fever*, has been frequently observed to prevail in the West Indies, along the shores of North America, particularly at New York and Philadelphia, and more lately in the southern parts of Spain. It has spread *epidemicallly* in those regions, and been productive of very great mortality in particular seasons.

It is scarcely necessary to apprise the student, that hot countries are subject, no less than cold, to the occasional visitations of epidemic disease. They have also, of course, their peculiar endemics, and the term *yellow fever* is currently applied, in the West Indies, to express modifications of fever different from that which I am now about to describe. To the want of precision in the naming and classing of fevers, and to carelessness in tracing the analogies and distinctions of epidemic and endemic diseases, may be attributed,

in a great measure, the dispute to which the subject of *yellow fever* has given birth.

Most of the genuine febrile diseases of hot climates appear to have a *bilious* tendency. The inflammatory as well as the intermittent and remittent endemics of those countries, are frequently accompanied with a yellow color of the skin, and other symptoms supposed to denote that the functions of the liver are materially disturbed. The symptoms and treatment of these forms of endemic disease, however, it is not my intention to discuss. The present object of inquiry is the epidemic *yellow fever*, such as raged in the West India Islands and at Philadelphia in 1793; at Cadiz in 1800; at Malaga in 1803; at Gibraltar in 1804 and 1813; and at Ascension Island in 1823. As this particular form of fever exhibited in all these situations very much of the same defined and in several respects peculiar character, I shall give a short account of its symptoms and progress, of the appearances found on dissection, and of the most approved system of treatment.*

The attack of *yellow fever* is

* For many of the remarks contained in this chapter, I beg to express my obligations to Dr. Fraser, late Inspector of Hospitals at Gibraltar, who obligingly gave me access to his voluminous and valuable documents on *yellow fever*.

ushered in, in the usual way, by languor and rigors. There is sometimes a peculiar dejection of countenance observed, with a remarkable aversion to the least motion; at other times there is an appearance of inebriation. The face is flushed; but the most prominent of the early symptoms of the disease is headach, of a very peculiar kind. It is exceedingly severe, and referred to the forehead and bottom of the orbits. The eyes appear dull, glassy, suffused, and protruded. The tongue is at first furred and moist, but by degrees it becomes dry and black, or sometimes of a fiery red color. The heat of skin is but little increased. The patient sometimes lies in an almost insensible state, but extreme restlessness has also been noticed.

To this succeeds the second striking feature of the disease, great irritability of the stomach. The matter rejected is very seldom bilious, or if it is so at first, it speedily loses that character. For the most part it is slimy and tasteless, and adheres in small flakes to the sides of the containing vessel. As the disease advances, it assumes a dark color, and comes to have the appearance of coffee-grounds. This is the *black vomit*, which may be considered the characteristic feature of this disease, as much as buboes and carbuncles are of the plague. The dejections have a tarry appearance. There is often noticed a total suppression of the urine, which, like the black vomit, is a fatal symptom. Hiccough, hemorrhages, and petechiæ, have been observed in some cases, even from an early period.

I have retained to the last the mention of that symptom which gives name to the disease, yellow-

ness of the skin, but it is not of that importance which might have been anticipated. Many cases indeed run their whole course without exhibiting it; but when it appears early, or when the skin assumes a leaden or livid cast, it is to be considered an unfavorable symptom. A few other peculiarities in the disease are all that remain to be noticed. The yellow fever is occasionally attended with an ulcerated state of the throat. A fatal termination has often happened in the most unexpected manner; a very singular remission of all the symptoms taking place about sixty hours from the first attack, and raising hopes which are soon to be disappointed. Death is sometimes preceded by a degree of low muttering delirium; at other times the patient sinks exhausted, but with the intellect quite unimpaired.

The usual duration of the yellow fever is from five to seven days. If the patient passes the sixth day without the occurrence of black vomit or suppression of urine, his chance of recovery is much increased; but even then symptoms like those of common typhus occasionally supervene, and prove fatal. Relapses in this fever are very rare.

Upon dissection, very few appearances present themselves which can be considered as throwing light on the pathology of the disease. The body has been observed speedily to become livid. Yellowness of the skin has sometimes been first noticed to occur after death. A state of turgescence of the cerebral veins has been described, and occasionally there has been observed a peculiar redness of the inner coat of the stomach. The gall-bladder is found distended

with dark and viscid bile. The structure of the liver is not found to be altered. It sometimes assumes an ash color.

Such are the most usual symptoms of the yellow fever. They will be seen to bear some resemblance to those of the plague; and the analogy between these diseases has been urged with much force by Sir J. M'Grigor. A more important analogy may be traced between the epidemic yellow fever and the genuine typhous fever of this country; and there can be no doubt that the former bears the same relation to the endemic fever of the West Indies, that typhus does to the common *synochus* of Europe. It is properly called, therefore, the *typhus icterodes*. It is the *malignant* fever of tropical climates, characterized, like the malignant fevers of temperate climates, by deepseated affection of the brain, and extreme irritability of the stomach, but in a higher degree of intensity.

The cause of the yellow color of the skin in this fever has been made a subject of inquiry. By some this appearance has been attributed to disordered function of the liver; by others, to bile absorbed from the intestinal canal without hepatic derangement. Sir Gilbert Blane has thrown out the idea, that it may be owing rather to a depraved state of the red globules of the blood. In whatever way this question may be decided, it is perfectly clear that the state of the *biliary* organs has very little to do with giving a character to this formidable disease, which is to be viewed as one of the most aggravated forms of typhoid fever. In respect of mortality, the yellow fever may even take precedence of the plague. At Gibraltar, in

1804, the disease raged among the inhabitants, uninfluenced by any distinction of age, sex, or condition.* The deaths amounted to somewhat more than one in three; a proportion, according to Sir Gilbert Blane, considerably above the devastation of the pestilence of the Levant.

The treatment of the epidemic yellow fever is a point which has attracted great attention from all classes of inquirers: but their observations tend only to show that it is a disease of so singularly malignant a nature, as, in a large proportion of cases, to bid defiance to all the efforts of art. This is particularly exemplified when the disease first makes its appearance in any town or district. The peculiar combination of circumstances, whether in respect of local situation, or of the state of the atmosphere, or of the constitution of the inhabitants, which gives the peculiar feature of malignity to the symptoms of the disease, operates also against the practitioner, and deprives him of the usual powerful means of combating fever. The severe headach which characterizes the early stages of the disease, naturally suggests bloodletting as a probable means of relief; but experience has proved that, though occasionally, it is not generally, beneficial. The blood, when drawn, separates very imperfectly; upon exposure to the air, it does not acquire its usual florid color, and scarcely ever exhibits a buffy appearance. In determining, however, the propriety of having recourse to bloodletting in yellow fever, the *habit of body* is certainly to be studied. In a ple-

* Of a population of nine thousand civilians, only twenty-eight persons escaped an attack of the disease.

thoric habit, where the pulse is firm, a single bleeding will probably be beneficial. All I wish to urge is, that venesection is useful rather with reference to the individual attacked than to the nature of the disease.

The principal object which it is found necessary to keep in view in the treatment of yellow fever, is the allaying that excessive irritability of the stomach which leads to the black vomit. Calomel, given at first in a smart dose, so as to operate freely as a purgative, and repeated in smaller doses at intervals of three or four hours, so as to keep up this effect, was the most approved practice among the English practitioners at Gibraltar, in 1813. To the calomel were occasionally united aloes and gamboge. In the exhibition of these medicines no time was to be lost; for it was only by their speedy and full effect, that the prevention or relief of the vomiting could be ensured. Pediluvia and tepid sponging were found beneficial. Under certain circumstances, the warm bath was administered with good effect. Cold applications to the forehead and hands occasionally served to relieve the urgent headache. When the powers of life appeared to fail, it is unnecessary to say that stimulants and cordials were had recourse to. Subacid drinks were given, and a strict antiphlogistic regimen pursued through the whole disease. The same rigid attention to diet and regimen was required during the period of convalescence.

I have stated that among the points in dispute regarding the yellow fever, is the question of the identity of the epidemic yellow, or Bulam fever, with the endemic fevers of the West Indies. Upon

this question an opinion has been already given. The other topics of controversy are, first, whether the disease be always imported, or whether it can ever be generated by a combination of common or endemic causes;—secondly, whether, being once received into a town, it propagates itself by contagion; and, thirdly, whether those who have passed through the disease are susceptible of it a second time. These are all important questions, the replies to which are not so obvious as to that of its pathological affinity, which has already been noticed; and they involve the most difficult parts of the controversy.

The first question is undoubtedly one which should be answered with some caution. Many circumstances connected with the early appearance of the epidemic yellow fever at Philadelphia in 1793, and at Gibraltar in 1804, strongly favor the idea of its having been in those situations an imported disease. Several other facts, however, might be adduced, which militate against the universality of this doctrine; and there is nothing inconsistent in allowing, that, though it is sometimes imported, the genuine malignant yellow fever may, under circumstances favorable to its development, be generated in any warm climate, by a combination of endemic causes. With regard to the second question, no reasonable doubt can surely be entertained by any candid, intelligent, unbiased man, that this disease, being once received into a town, is contagious. The evidence in favor of this opinion is certainly as strong as for that of the contagion of typhus, or of plague. Whether the yellow fever bears the

greater analogy to the former or latter of these diseases, may indeed be disputed. We may deny that there is anything specific in the contagion of yellow fever; but that the disease is propagated by contagion of some kind, cannot be questioned, after the ample experience which has been had, both in America and Europe. If any doubts could have been entertained while the disease occurred only in the West Indies, in consequence of the resemblance of the epidemic to the endemic fevers of those islands, they must have yielded to the obvious arguments suggested by its appearance in Cadiz, Gibraltar, and still more lately at the Island of Ascension.* The contagious nature of the disease, it may be remarked, is a question which is perfectly distinct from that of its foreign or endemic origin.

Some of the laws of the contagion of yellow fever appear to be ascertained with tolerable accuracy. Its latest period varies from two to eight days. Ten days is, I believe, the longest period recorded of yellow fever appearing, after exposure to the contagion, and removal to a freely ventilated atmosphere. The contagion of yellow fever has a peculiar range of atmospheric temperature, but on a higher scale than that of the plague. It has never been known but in those countries and at those seasons when tropical heats, that is, of eighty degrees Fahrenheit's, or upwards, prevail. It never fails to disappear as the winter approaches. It is certainly a sin-

gular circumstance in the history of the yellow fever, that it has never prevailed to any remarkable extent at a distance from the sea, and that its principal ravages have been on the shores of the Atlantic Ocean.

The last circumstance which it is of importance to notice in the history of the yellow fever and the laws of its contagion, is the question whether it can be taken a second time. The answer is a very short one. Although a few well attested instances to the contrary have been recorded, still a most extensive experience has satisfactorily proved that the immunity from second attacks is nearly complete, and that it forms one of the most striking characteristics of this remarkable disease.

II.

LOOSE CARTILAGES IN THE KNEE JOINT.*

CASE.—D. M., ætat. 24, farm-servant, complains, Dec. 3d, that the motions of his right leg are much impeded by some firm moveable bodies in the cavity of the knee joint. He thinks they are three in number, but has never been able to fix more than two of them at one time; the largest is the size of a hazel nut, the smallest that of a field bean. No increased secretion of synovia nor inflammation of the joint. States that two years ago he first felt uneasiness in the joint when at work, and twelve months afterwards observed a loose body moving in the joint. This was removed five months ago, and when he recovered from the operation the

* Consult Dr. Burnett's "Official Report of the Fever which appeared in his Majesty's Ship Bann, and the Island of Ascension, in 1823." London, 1824.

* Medico-Chirurgical Review.

present ones were discovered. On the 7th, the substances being previously secured at the inside of the joint, and an assistant having drawn the integuments outwards, an incision was made at once through the integuments and capsule of the joint, and the two substances easily extracted.

The lips of the wound were brought together by plaster and bandage, and motion effectually prevented by a splint placed under the limb. On the 12th the wound was firmly healed, and on the 29th the patient was dismissed cured. On examining the substances removed from the joint, they appeared externally to be entirely cartilaginous, but, on making a section of each, the smaller was found to be nearly equally composed of cartilage and bone, the larger much more completely ossified.

"It has been stated that the existence of such bodies is generally accompanied with increased secretion of synovial fluid. In some of the first cases of this description, particularly in that given by Paré, a very considerable effusion into the knee joint had taken place, and the operation of opening the joint was performed to evacuate the fluid, and, during this, the foreign body presented itself at the opening, and was extracted. In general, the discovery of such substances has been preceded by injuries of the joint and slight inflammatory action; but, in others, sudden lameness takes place, and examination of the joint discovers the cause, without any well marked inflammation.

"With respect to the substance of which they are composed, I believe them all to be primarily

effused lymph, but in process of time they become cartilaginous, ossified in part, and ultimately wholly so. In repeated instances have such bodies extracted from the same knee presented all these characters, thus proving that the difference of texture depended solely on their duration in the joint.

"Some have regarded these substances as pieces of cartilage, detached by falls or bruises from the articulating surfaces of the joint; while others, and with more reason, consider them as arising quite independent of this cause.

"Monro, Baillie, Richter, Wardrop, and others, have found similar substances, cartilaginous and osseous, in the tunica vaginalis testis, complicated with hydrocele; and one example of this kind came under my own observation. In some of these instances, small portions of coagulable lymph were likewise found.

"I have had no opportunity of examining the knee joint of any person who died with such substances in the joint, nor am I aware of any such dissection being on record; but judging from the appearances in the coverings of the testicle, when similar bodies are found there, I should be inclined to expect that where they form in the knee or other joints, they are the result of inflammatory action, producing effusion of lymph, which passes through the cartilaginous state into the osseous. The capsular ligament, when the disease has continued long, will, in all probability, be thickened.

"The old axiom that wounds of joints, if not mortal, are exceedingly dangerous, has still influence over the minds of some

practitioners, and induces them to prefer a palliative treatment by means of bandages, to removing them by an incision.

"When, however, no inflammatory action is present in the joint, when the patient is young and healthy, and means are taken to prevent all motion of the joint after the operation, I conceive the extraction of these bodies as by no means likely to be attended with danger. There are some constitutions, however, in which the most trifling operation is likely to prove dangerous; and I once saw most alarming symptoms follow the operation, attributable, however, in some degree, to the patient having used the limb soon after the operation. It is always proper to put this out of his power by means of splints."

We are disposed to agree with Mr. Cowan in believing that this operation has been regarded with a too superstitious dread by the older surgeons. We must take care, however, lest we run into an opposite error, and exchange the extreme of caution for temerity, an exchange which would certainly be for the worse. Some patients have died after the operation for removing loose cartilages from the knee joint, and more have been placed in imminent peril. What all the world says may not be strictly true, but it never is entirely false, and all the world have pronounced that a wound of a large joint is not to be looked on as a bagatelle. We grant that bad consequences seldom ensue except in a person of weak habit or injured constitution. But this kind of argument is not worth so much as might be thought; for the evidences of that bad habit and constitution are by

no means always apparent before the operation, and consequently the surgeon only ascertains it by the result. Of this we have seen more than one example. With regard to the application of splints, we can bear our testimony to the advantages derived from their employment. If perfect repose is procured for the joint, and vigilant caution exercised in guarding against inflammation, we believe that loose cartilages may be extracted from the articulation with much less danger than is commonly believed.

III.

NEWLY-DISCOVERED AMERICAN MEDICINAL LEECH.

THE following memoranda, which it seems were presented to the Philosophical Society of New York by the celebrated Dr. Mitchill, we copy from a publication entitled *the American Lancet*. Two of a trade, it is said, cannot agree,—but there seems to be, in this case, no bitterness of feeling between the lancet and the leech.

It has been said, and I believe truly, that the *hirudo medicinalis*, or medicinal leech of naturalists, is not a native of America, or, at least, has never been found in any of our confederated States. It has therefore become a regular branch of business to import them for remedial use, from different parts of Europe. In the New York gazettes, advertisements for the sale of such animals are frequent. The common price among the dealers is three dollars a dozen. Frequently there are none in the market.

Several years ago, I had medi-

tated to procure some of these foreign leeches, and put them into one of our fresh water ponds, for multiplication. Partly, however, from neglect, and partly from other employment, the project was never carried into execution.

It appears now, that the omission was a matter of little or no consequence, as leeches have been discovered in a number of the ponds upon Long Island, and over the continent, that are excellent bleeders in the practice of physic. Some persons have supposed them to be horse leeches, or individuals of the *hirudo sanguifuga*. Be that as it may, physicians and patients, in a neighboring region which I visited a few days ago, agree in ascribing to them *blood-sucking* qualities, superior to those which are brought from abroad. They bite readily, fill their large bodies with blood, and leave a wound from which blood flows after they have ceased to suck. Hence they are particularly adapted for this local evacuation.

Let the question of the species be determined as it may, either that the present is the *horse leech* of Europe, or that it is an *American variety*, or lastly, that it is an *undescribed species*, it is very comfortable to know that its remedial powers have been sufficiently tested.

Like other leeches, these have the power of great dilation and contraction. From the length of about a span, they can shorten themselves almost to an inch.

The back is of an olive green color; the belly of a pale orange yellow. When at rest, the figure, as is usual with the genus, is rather flattish; when in motion, some-

what cylindrical, or rather conical. The margin at the sides is ciliated; and the yellow is distinguished above the line, encroaching a little upon the green. Along the middle of the back, longitudinally, is a row of about twenty spots, nearly the color of the belly. On each side, close to the ciliated margin, is a row of about as many spots, which are almost black. The yellowish spots run through, or are encircled by a nebulous discoloration, of a different hue both from the green back and the blackish spots. Between this dusky sort of stripe, and the rows of black spots, there are rows of dusky colors. These latter are oblong; whereas the spots are round or circular. The belly is also variegated irregularly with black dots; on the belly, also, there are three pale reddish blotches.

Though we introduce from distant countries, many things which our own country produces, or can produce, yet it is agreeable to know that we can procure an article at home, although in the course of trade and commerce we persist in deriving from a foreign source.

I have little doubt that the present is a species different from any hitherto registered in the books of medicine and natural history.

IV.

SWIMMING.*

SWIMMING has with great propriety been pronounced "the purest exercise of health;" combining in itself the advantages of

* From the Journal of Health.

muscular exertion with those of bathing. It is to be observed, however, that there is, perhaps, no exercise which calls into violent action a greater number of muscles, and which, therefore, so quickly induces fatigue. It is on this account, independent of the effects of the cold water in which the body is immersed, an amusement but ill adapted to the aged, and those of an enfeebled and delicate constitution. Even by the young, the healthful and robust, it should not be carried too far, lest injury rather than benefit result from it.

It is during the summer season alone, that this species of exercise can, with propriety, be indulged in. Although the savage, in northern climates, is said to plunge with impunity, at every season of the year, into the coldest stream, yet the health, if not the life of an individual, reared amid the luxuries and refinements of civilized society, would be endangered, were he to attempt a similar course.

The morning is undoubtedly the period best adapted for the exercise of swimming, but by many, an hour or two before sunset has been preferred, the water having then acquired a considerable degree of warmth from the sun's rays. When the former period is found peculiarly inconvenient, the latter may be adopted, rather than the exercise should be entirely abandoned. During the middle portions of the day, when the heat is oppressive, to swim in an open river would be attended with danger.

Like every other species of active exercise, the one under consideration is to be abstained from until several hours after eating.

It is important to select for the amusement of swimming a pure running stream, of sufficient depth, and, if possible, with a sandy shore and bottom. Stagnant, and thickly shaded pools, particularly in the neighborhood of marshes, ought carefully to be shunned.

A ridiculous, and to a certain extent dangerous, idea prevails with many, that the body should be allowed to become perfectly cool previously to entering the water. On the contrary, it will very generally be found highly advantageous to partake of a degree of exercise before immersion, sufficient to produce a gentle increase of the circulation of the blood, and a slight augmentation of the heat of the body. But, while in the earlier stages of exercise, before a copious perspiration has dissipated the heat, or the system has become exhausted by fatigue, an individual may fearlessly plunge into the water, —this would be replete with danger, if practised after exercise has been urged so far as to occasion profuse perspiration, with languor and fatigue. Under such circumstances the heat of the body is fast sinking, and immersion in cold water would produce a severe and protracted chill.

Immediately on leaving the water, the body should always be wiped perfectly dry by friction with a coarse towel; and after dressing, a gentle degree of exercise ought to be taken. Nothing is indeed more prejudicial to health, than sitting, or remaining inactive, subsequently to bathing. Walking briskly to and from the place selected for swimming, particularly if it be at a reasonable distance from the dwelling, will in most cases be the best exercise that can be adopted, both

before entering and after coming out of the water.

It was not our intention, in the present article, to teach the art, or to describe the various modes of swimming. With Franklin, Saint Pierre, Saltzman, and others, we are of opinion, however,

that such instruction should constitute an item in the education of every child, not merely to enable him to enjoy a beneficial and healthful exercise, but to ensure his own safety, and to enable him to minister to that of others, in cases of accidental submersion.

BOSTON, TUESDAY, JULY 27, 1830.

CHLORIDES OF LIME AND SODA.

At a late meeting of the Boston Society for Medical Improvement, the Committee on Chemistry was instructed to report on the comparative advantages of the Chlorides of Lime and Soda. The following is the Report of that Committee, read at the last meeting of the Society, and published because it contains a statement of some facts which, at the present time, may be particularly interesting to the profession and the public.

Report.

The Committee to whom was referred the consideration of the comparative merits of the common bleaching powder, or chloride of lime, and the preparation of Labarraque, called chloride of soda, as disinfecting and purifying agents, report:

That they cannot discover that, as such agents, either possesses advantages over the other. Both have been used abroad, and in this country, to destroy noxious effluvia, to remove infection, and to prevent putrefaction. For these purposes they are more effectual than any other articles of the shop or the laboratory. They have been likewise used as medicinal agents on man. For this purpose the preparation of Labarraque has been preferred,

though apparently for no other reason than that it is the neater preparation of the two.

The properties of each are admitted to depend on the chlorine they contain, and to be proportioned to the amount thereof.

The state in which the chlorine exists in either article is uncertain. Many distinguished chemists consider the bleaching powder a true chemical compound of its ingredients, constituting a subchloride of the protohydrate of lime, which, when thrown into water, is partly soluble,—half the lime subsiding, and leaving a true chloride in solution. Dr. Ure, who has more recently examined this substance, finds the proportion of chlorine to vary exceedingly in different specimens, and *he* is led to think that it is not a true chemical compound. The bleaching power, which is the test of the proportion of chlorine, contained in a given weight of the powder, varies with age and with the mode of preparation. Different samples procured at the shops and examined by the committee, contained chlorine in the proportion of 1.2.4 nearly.

With regard to the Chloride of Soda, the committee are of opinion that there is no such substance known, the article so called being usually prepared by passing a stream of chlorine gas through a solution of the carbonate of soda, by which process the chlorine is retained without the carbonic acid being given off.

By evaporation, crystals like those of carb. soda are obtained, which, though possessing some bleaching power, have much less than the liquid itself. The sole use of the salt in this preparation, is, in the opinion of your committee, to augment the solvent power of the water. That it does this, will appear directly.

It only remains to ascertain the precise amount of chlorine contained in each of these preparations. According to Labarraque's formula as given by Magendie, 1 pint of his liquid contains 1866 grs. (3 oz. 5 drs. 26 grs.) carb. soda, and 245 grs. ($\frac{1}{2}$ oz. 5 grs.) of chlorine. One pint of pure water would dissolve only 43 grs., that is, twice its bulk of chlorine, a little over one-sixth as much. This quantity, viz., 245 grs. of chlorine, is equal to that in 612 grs. ($1\frac{1}{4}$ oz. 12 grs.) of the bleaching powder or chloride of lime, using Dr. Ure's estimate, which is forty parts chlorine to about sixty of lime. For use, Magendie directs the chloride of lime to be dissolved in sixty times its weight of water. 612 grs., then, would make 4.78 pints of clear solution, containing, of course, as much chlorine as is held in one pint of the preparation of Labarraque. The latter solution, then, is five times stronger nearly than the former.

Labarraque's article, or one like it, is sold here at one dollar a bottle, or at between 50 and 60 cents a pint. Chloride of lime may be had at the apothecary's for 25 cents a pound, and cheaper probably at the manufacturers. For the price of one pint of Labarraque's liquid, then, we can procure more than two pounds of the chloride of lime, containing 25 times the amount of chlorine, and capable of making 15 gallons of clear solution,—only a fifth part as strong as the other, to be sure, but as strong as it should ever be used, Labarraque's solution requiring always to be diluted before using it.

WALTER CHANNING,
for the Committee.

JEWISH MEDICAL POLICE.

AMONG the laws and customs imposed on this ancient nation by Divine authority, those are not the least remarkable which have for their object the prevention of disease, and the proper treatment of those who were already affected with any of the prevalent maladies of the climate and country. The various forms of cutaneous disease were made the subject of especial attention by the Supreme Lawgiver. It was highly important that these should be carefully distinguished from one another, since, while the mild forms were uncontagious, and scarce required treatment, the graver varieties made it necessary that the affected person should be subjected to strict regimen and—to guard against the spread of infection—be carefully secluded. Accordingly, we find that every one affected with eruptive disease was obliged to undergo a careful examination by the priest, who, as was usual in the early ages, united in himself the sacerdotal and medical character. If, on inspection, it appeared to be a true leprosy, having the peculiarities which marked the malignant form of that disease, he was to be adjudged unclean, and treated accordingly. If, as was most generally the case, the character of the disease was doubtful, the patient was secluded for a week, and then re-examined. The result of this second examination might be a discharge, a sentence of leprosy, or a new term of probation; the latter was frequently imposed, and four, five, or even six weeks might elapse, before this important point was fully

determined: such were then, as they now are, the uncertainties of medical diagnosis. Whenever a final sentence of leprosy was pronounced, the consequence was a banishment without the camp, very strict limitations of intercourse with healthy individuals, and the imposition of such rules, in regard to the person and clothing, as would be most likely to prevent the extension of the malady.

With regard to the precise symptoms by which the contagious leprosy was distinguished from milder eruptions, the most important can be gathered from the sacred writings themselves, though the description there given is not wholly free from obscurity. The circumstances which seemed to have been most relied on in making the diagnosis, were, first, ulceration or depression of the surface beneath that of the sound skin, presenting the appearance of the "living flesh;" and, secondly, the loss of the hair of the part, or the change of its color to whitish or yellow.—See Levit. xiii. *passim*.—It appears that although the eruption covered the whole surface of the body, yet, if the skin remained sound, and no red flesh were discovered, the patient might be regarded as clean; while the appearance of this was sufficient to establish the character of a true leprosy.—See ver. 13.—There is little doubt, however, that the milder modifications of the disease often degenerated into the severe form alluded to. The generic name for leprosy among the Hebrews, and which probably included many forms of cutaneous eruption, was Berat; the specific appellation of the non-

contagious form was Boak. "If," says the law, "a man or woman have in the skin of the flesh a berat, a white berat, the priest shall look; and behold, if the berat in the skin of the flesh be dull, it is a boak growing in the skin: he is clean."—Levit. xiii. 39, translated by Good.—With respect to the change in the color of the hair, it is to be recollected that the natural color of the hair in that region is black; and the alteration of this to a yellowish white no doubt resulted from some change in the rete mucosum, from which the color of this part is derived.—What modes of treatment were adopted in the several varieties alluded to, we are not informed. In fact, as the subject is introduced with a sole view to its political relation, no details on this point could properly be expected. To the physician, however, who is interested in antiquities generally, and in the early history of his own science, the part of the Scriptures from which the above observations are gathered will furnish an abundant field of inquiry and research.

DIGITALIS.

THIS article, which, to judge from the silence maintained respecting it, has lately done little worthy of its ancient reputation, is mentioned in a foreign journal as having, in one instance at least, exerted an unequivocal and very fortunate influence as a diuretic in dropsy. The disease had been gradually increasing for six months, unchecked by the successive employment of venesection, the mild diuretics, cathartics, epispastics, &c., when the use of the digitalis was

commenced in the dose of half a grain every hour. Powerful diuresis followed immediately, with a striking amelioration of the symptoms, and, by a persevering employment of the article, the disease was entirely and radically removed.

It is a question of some interest, whether the diuretic effect of this substance is the result of its action upon the circulating system, or whether it is to be considered an independent and collateral effect. Those who support the former opinion, explain it by supposing that secretion is diminished with the circulation; and the activity of the absorbents remaining undiminished, the balance is in this way restored. The objection to this view of the subject is, that it supposes diminished circulation to be a more permanent effect of the use of this article than it is in fact found to be. Indeed, it may well be doubted whether this be in fact a primary effect, and does not result from an action on the nervous system, producing a pathologic state of the brain more or less resembling apoplexy. This idea certainly derives some support from the effect of digitalis on the nervous system, when taken in a somewhat larger dose than is sufficient to produce a sensible effect on the pulse. Whatever may be thought of this suggestion, it is at least certain, that, with the exception of the various mercurials, there is no article whose influence on the system is more remarkable or unequivocal, or better worthy the study of the physiologist and practitioner.

BELLADONNA IN HERNIA.

In noticing, some time since, the extent to which narcotic substances were known to produce their specific effects through the medium of the cutaneous and mucous surface, we mentioned an instance of recent occurrence, in which the extract of belladonna, applied to the surface of a bougie, had materially assisted the passage of the instrument through the strictured urethra. An equally remarkable proof of the efficacy of this article was given a short time since in one of the London hospitals, in a case of strictured rectum, which appeared in our columns during the present month. We have now to mention a third instance of its successful employment, which appears to us to possess even more interest than either of the two preceding. It occurred at Naples, in January last, in a case under the care of Dr. Meola, of that place. The patient, a man advanced in life, had a hernia of twelve years continuance, for which he habitually wore a truss, and which, whenever it descended, had always been reduced without difficulty. On this occasion, however, after unusual exertion, the intestine came down, and resisted the efforts which were made to replace it. The usual means were resorted to, such as bleeding, the use of cold, &c., in order to effect the taxis, but without success. Before resorting to an operation for relief, it was concluded to try the effect of belladonna applied externally over the hernial tumor. Accordingly, the use of this substance in the form of ointment was commenced, about twelve hours after the

accident had occurred. The effect of the first friction was to relieve the pain, which had previously been very severe. An hour afterwards a second portion was rubbed in, which produced evident softening of the intestine. The third friction aided the effect of the two first, and enabled the surgeon to reduce the hernia with great ease. The patient did well, and was almost immediately able to resume his usual occupation.

DISSECTION IN CONNECTICUT.

WE have already alluded to the liberal policy with respect to dissection, pursued by the legislature of Connecticut. The following sections, touching this subject, of an act concerning crimes and punishments, passed in the legislature of that state in May last, will give a clearer view of the subject than can be obtained by any explanation or remarks of our own.

Sec. 87.—If any person or persons shall open the grave of any deceased person, or the tomb where the body or bodies of any deceased person or persons have been deposited, or shall remove the body or bodies, or remains of any deceased person or persons, from their grave, graves, or place of sepulture, for the purposes of dissection, or any surgical or anatomical experiments, or for any other purpose, without the consent of the near relations of the deceased; or shall in any way aid, assist, or procure the same to be done, or shall receive, conceal, or secrete, any such body or bodies, or shall aid or assist in any surgical or anatomical experiments, or demonstrations therewith, or dissections thereof, knowing said body or bodies to have been so taken or removed from the place or places of their sepulture,

every such person so offending, shall forfeit and pay a fine not exceeding two thousand dollars, nor less than two hundred dollars, and shall be further punished by imprisonment in the Connecticut State Prison, for a term not less than two, nor more than five years, at the discretion of the court having cognizance of the offence.

Sec. 88.—No professor, teacher or lecturer, in any college, academy, school, or medical institution, shall perform any anatomical or surgical experiments, on the body of any deceased person whatever, in any building in which the students of such college, academy, school, or medical institution, are taught or instructed in medical science, until such professor, teacher or lecturer, shall have first given bonds, with sufficient surety, to the treasurer of the State, in the sum of one thousand dollars, conditioned that no body of any deceased person which shall have been disinterred, or procured, contrary to the provisions of the last preceding section of this act, shall be introduced or brought within such building during the time that he holds the office, or exercises the duties of professor, teacher or lecturer, as aforesaid, in such college, academy, school, or medical institution, or elsewhere in this State. And if any such professor, teacher or lecturer, or any other person, shall perform any anatomical or surgical experiments on the body of any deceased person, in any such building, without such professor, teacher or lecturer having first given bond as aforesaid, he, the said professor, teacher or lecturer, being thereof duly convicted, shall be punished by fine not exceeding two thousand dollars, nor less than five hundred dollars, at the discretion of the court having cognizance of the offence.

Sec. 89.—That the mayor and two senior aldermen of any city, and the selectmen of any town, in which such college, academy, school, or

medical institution, may be located, shall have authority, at all times, to enter and inspect every part of such building.

Sec 90.—That the bodies of criminals who are or shall be confined in the Connecticut state Prison for crimes, and shall die in said Prison, who have no known relations, shall, with the approbation of the directors of said prison, be at the disposal of the professors of anatomy and surgery in the medical institution in this State, to be used for advancing medical science in this State, and shall at all times be subject to their order; and also the bodies of persons capitally punished, under sentence of the law, at the discretion of the court before whom the conviction of such persons takes place.

Sec. 91.—That in all cases of a breach of the eighty-seventh section of this act, it shall be the duty of the governor, or the person exercising the office of governor, upon application of the select-men of the town where such offence shall have been committed, to offer a reward not exceeding two hundred dollars for the apprehension of any person or persons, who shall have been guilty of the acts or crimes, or either of them, in the eighty-seventh section of this act, mentioned; and in case of the apprehension and conviction of such offender or offenders, the comptroller of public accounts, upon the application of the governor, or the person exercising the office of governor, shall draw an order on the treasurer for the amount of the reward thus offered, who shall pay the same.

Dr. Mott's new Instrument.—As we published on our 198th page a let-

ter from Bath, (Eng.) to the Medical Gazette, respecting an instrument invented by Dr. Mott, we feel bound to present also the following note, which appears in the last No. of our London contemporary.

To the Editor of the London Med. Gaz.

SIR—In publishing the case of immobility of the jaw, with a drawing of the instrument used for opening the mouth, my only wish was to make known to others an instrument which I had found useful, and particularly adapted to such cases; but I did not anticipate the effect it has produced on your Bath correspondent.

The invention of the instrument used by me was elicited by the case I had to treat, and could not be influenced by any original in the possession of another person, with whom it remained unnoticed, though it may have been invented for centuries.

It is a little amusing that this instrument, thought to be unique, should have produced its counterpart, and a claim to originality at so distant a period.

Yours, very respectfully,
VALENTINE MOTT.

New York, 25 Park-Place,
April 30, 1830.

Continued Health of the City.—Notwithstanding the excessive heat of the past and preceding week, in which the thermometer varied for eight days between 87 and 97 deg. Far. the health of our citizens continues uninterrupted by the usual diseases of summer.

WEEKLY REPORT OF DEATHS IN BOSTON, ENDING JULY 10.

Date.	Sex.	Age.	Disease.	Date.	Sex.	Age.	Disease.
July 3.	F.	23 yrs	consumption		M.	30 yrs	brain fever
	M.	3 1-2	dropsy on the brain	6.	F.	31	stoppage in the bowels
	M.	23	drowned	9.	F.	5	croup
4.	F.	32	childbed fever		F.	3	cholera infantum
5.	M.	9	drowned	10.	M.	49	debility
Males, 5,—Females, 5.				Total, 10. Stillborn, 3.			

ADVERTISEMENTS.

MEDICAL TUITION.

THE subscribers continue to receive and instruct Medical Students. A suitable room is provided for them, which is open at all times, Sundays excepted, from 7 in the morning to 9 in the evening. A systematic course of study is pointed out, and the necessary books are provided. Frequent examinations are held in the several branches of study, with free explanations, and such other modes of teaching as shall seem to the instructors best calculated to aid the progress of their pupils. In practical Anatomy, they will avail themselves of the best opportunities that can be obtained. Gentlemen who place themselves under their direction have the privilege of attending gratuitously the Lectures on Anatomy and Surgery in the Medical School at Harvard University, and the Medical and Surgical Practice, and the Surgical Operations, at the Massachusetts General Hospital; and also of acting as dressers for the surgical patients at the Hospital.

Terms, 100 dollars for a year; 75 dollars for six months; and 50 dollars for a quarter;—payments to be made in advance. Application may be made to Dr. HALE, No. 14 West Street.

JOHN C. WARREN,
GEORGE HAYWARD,
ENOCH HALE, Jr.

Boston, June 26.

6t.—July 13.

PRIVATE MED. SCHOOL.

THE subscribers have associated for the purpose of giving a complete course of private Medical Instruction, and the following arrangements are now in operation:—

The pupils are admitted to the practice of the Mass. General Hospital, and receive Clinical Lectures on the cases from Drs. Jackson, Channing and Ware.

Private Lectures, with examinations, are given in the intervals of the public lectures of the University.

On Midwifery and the Diseases of Women and Children, and on Chemistry, by Dr. CHANNING.

On Physiology, Pathology and Therapeutics, by Dr. WARE.

On the Principles and Practice of Surgery, by Dr. OTIS.

On Anatomy, Human and Comparative, by Dr. LEWIS.

Private Instruction will be given in Practical Anatomy, by means of demonstrations and dissections.

Such students as may be disposed, will have opportunity of acquiring a knowledge of Practical Pharmacy.

Rooms for all the purposes contemplated, have been provided in a convenient and central situation.

Application to be made to Dr. WALTER CHANNING.

JAMES JACKSON,
WALTER CHANNING,
JOHN WARE,
GEORGE W. OTIS, Jr.
WINSLOW LEWIS, Jr.

July 6.

12t.

MED. SCHOOL IN BOSTON.

THE Courses of Lectures begin annually on the third Wednesday in October, and are continued daily for three months, on the following subjects:—

Anatomy and Surgery, by JOHN C. WARREN, M.D.

Chemistry, by JOHN W. WEBSTER, M.D.

Materia Medica, by JACOB BIGELOW, M.D.

Midwifery and Medical Jurisprudence, by WALTER CHANNING, M.D.

Theory and Practice of Physic, by JAMES JACKSON, M.D.

The apparatus and collections of specimens used in illustrating the demonstrative courses, are very extensive. The fees for all the courses amount to \$70. Board is obtained for about \$3 per week.

This institution now offers greater advantages for the acquirement of a thorough medical education, than it has done at any former period of its history. During the last two years the means of obtaining practical knowledge of the anatomical structure of the human body have been amply supplied to pupils, probably at a less expense than in any other of the schools in the United States. The opportunity of witnessing numerous important and capital operations in surgery, and of attending the clinical practice of one of the best regulated hospitals in this country, are gratuitously afforded to all who attend the lectures of the professors.

June 22.

7t

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.